

Application No. 10/645,856
Attorney Docket No. 29250-000924/US

AMENDMENTS TO THE CLAIMS

The following is a complete, marked-up listing of revised claims with a status identifier in parenthesis, underlined text indicating insertions, and strike through and/or double-bracketed text indicating deletions.

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LISTING OF CLAIMS

1. (Currently Amended) A method of receiving load information of a cell in a wireless communication system, comprising:
determining a cell loading state based on a comparison of cell loading to one or more thresholds, the one or more thresholds being adaptive depending on cell service mix, and
receiving the cell load information at a first reporting periodicity, if the cell is determined to be in a low cell loading state, and
receiving the cell load information at a second reporting periodicity more frequent than the first reporting periodicity, if the cell is determined to be in a high cell loading state.
2. (Previously Presented) The method of claim 1, wherein the cell load information is received on one of a dedicated channel and a shared channel.
3. (Previously Presented) The method of claim 1, wherein the wireless communication system is a universal mobile telecommunications system (UMTS).
4. (Currently Amended) A method of providing cell load information in a wireless communication system comprising:
determining a cell loading state based on a comparison of cell loading to one or more thresholds, the one or more thresholds being adaptive depending on cell service mix, and
reporting the cell load information at a first reporting periodicity, if the cell is determined to be in a low cell loading state, and
reporting the cell load information at a second reporting periodicity more frequent than the first reporting periodicity, if the cell is determined to be in a high cell loading state.

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5. (Previously Presented) The method of claim 4, wherein the cell load information is provided on one of a dedicated channel and a shared channel.

6. (Previously Presented) The method of claim 4, wherein the wireless communication system is a universal mobile telecommunications system (UMTS).

7-20. (Canceled)

21. (Currently Amended) The method of claim 1, wherein the one or more thresholds are adaptive depending on cell loading and the cell service mix. ~~determination of the cell being in a low cell loading state or a high cell loading state is based on a comparison of the cell loading to one or more thresholds.~~

22. (Currently Amended) The method of claim ~~21~~, wherein the one or more thresholds include an uplink threshold for comparison against cell load measurements measured by a radio network controller, and a downlink threshold for comparison against downlink cell load measurements measured by the cell.

23. (Previously Presented) The method of claim 1, wherein the determination of the cell being in a low cell loading state and a high cell loading state is based on a comparison of the cell loading to a virtual threshold with differing resulting periodicities depending on whether the cell loading exceeds or falls below the virtual threshold.

24. (Currently Amended) A method of receiving load information of a cell in a wireless communication system, comprising:

determining a cell loading state based on a comparison of cell loading to one or more thresholds, the one or more thresholds being adaptive depending on the cell loading, and

receiving the cell load information at a first reporting periodicity, if the cell is determined to be in a low cell loading state, and

receiving the cell load information at a second reporting periodicity more frequent than the first reporting periodicity, if the cell is determined to be in a high cell loading state.

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~~The method of claim 21, wherein the one or more thresholds are adaptive depending on at least one of cell loading and cell service mix.~~

25. (Cancel)

26. (Currently Amended) The method of claim 4, wherein the one or more thresholds are adaptive depending on cell loading and the cell service mix. ~~determination of the cell being in a low cell loading state or a high cell loading state is based on a comparison of the cell loading to one or more thresholds.~~

27. (Currently Amended) The method of claim 264, wherein the one or more thresholds include an uplink threshold for comparison against cell load measurements measured by a radio network controller, and a downlink threshold for comparison against downlink cell load measurements measured by the cell.

28. (Cancel)

29. (Currently Amended) A method of providing cell load information in a wireless communication system comprising:
determining cell loading state based on a comparison of cell loading to one or more thresholds, the one or more thresholds being adaptive depending on cell loading, and
reporting the cell load information at a first reporting periodicity, if the cell is determined to be in a low cell loading state, and
reporting the cell load information at a second reporting periodicity more frequent than the first reporting periodicity, if the cell is determined to be in a high cell loading state.
~~The method of claim 26, wherein the one or more thresholds are adaptive depending on at least one of cell loading and cell service mix.~~

30. (Cancel)

31. (Currently Amended) A method of reporting cell load information in a wireless communication system comprising:

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comparing a given cell loading measurement against one of two thresholds, an uplink loading threshold representing a difference between an uplink call admission control (CAC) threshold and a consumption margin set for the uplink, or a downlink loading threshold representing a difference between a downlink CAC threshold and a consumption margin set for the downlink, the one of two thresholds being adaptive depending on cell service mix, and

reporting cell load measurement information at one of two different periodic intervals based on the comparison,

wherein reporting one of the periodic interval is more frequent than the other periodic interval.

32. (Previously Presented) The method of claim 31, wherein reporting includes reporting the cell load measurement information at a first periodic interval, if the cell load is below the uplink loading threshold or downlink loading threshold, else

reporting the cell load measurement information at a second periodic interval shorter than the first, as the cell load exceeds the uplink loading threshold or downlink loading threshold.

33. (Previously Presented) The method of claim 31, wherein the consumption margins for the uplink and downlink are based on maximum consumption values for corresponding supported services in the uplink and downlink.

34. (Previously Presented) The method of claim 31, wherein the given cell load measurement for comparison against the uplink threshold is measured by a radio network controller, and the given cell load measurement for the comparison against the downlink threshold is measured by the cell itself.

35. (New) The method of claim 31, wherein the of two thresholds is adaptive depending on cell loading and the cell service mix.

36. (New) A method of reporting cell load information in a wireless communication system comprising:

comparing a given cell loading measurement against one of two thresholds, an uplink loading threshold representing a difference between an uplink call admission control (CAC)

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threshold and a consumption margin set for the uplink, or a downlink loading threshold representing a difference between a downlink CAC threshold and a consumption margin set for the downlink, the one of two thresholds being adaptive depending on cell loading, and reporting cell load measurement information at one of two different periodic intervals based on the comparison, wherein reporting one of the periodic interval is more frequent than the other periodic interval.